



**INTRODUCTION**

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**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.**

A. Michael J. Guntrum, 800 West Hersheypark Drive, Hershey, PA 17033.

**Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

A. I am employed by Pennsylvania-American Water Company (“PAWC” or the “Company”) as Senior Project Manager – Engineering.

**Q. WHAT ARE YOUR RESPONSIBILITIES AS PAWC’S SENIOR PROJECT MANAGER – ENGINEERING?**

A. As Senior Project Manager – Engineering for PAWC, I am responsible for the performance of due diligence activities related to potential water and wastewater acquisitions in the state of Pennsylvania.

**Q. PLEASE DESCRIBE YOUR PROFESSIONAL EDUCATION AND EXPERIENCE.**

A. I received my Bachelors of Science (B.S.) degree in civil engineering in 1994 and a Masters of Engineering degree (M.E.) in Environmental Engineering in 1995 from the University of Idaho. In 2010 I received my Masters in Business Administration (MBA.) from Lebanon Valley College. I have worked in various engineering roles and have over 20 years of experience in environmental engineering related to municipal and industrial water and wastewater treatment. I have worked at Pennsylvania American Water since 2003 in roles related to the acquisition of water and wastewater facilities. I am a

1 registered Professional Engineer in Pennsylvania and a hold a Project Management  
2 Professional (PMP) certification from the Project Management Institute (PMI).

3 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PENNSYLVANIA**  
4 **PUBLIC UTILITY COMMISSION (“COMMISSION”)?**

5 **A.** No.

6 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

7 **A.** My prepared testimony describes the wastewater collection and treatment system  
8 (“System”) currently owned and operated by the Borough of New Cumberland (“BNC”)  
9 that PAWC has agreed to acquire (“Transaction”), as more fully described in the direct  
10 testimony of Bernard J. Grundusky, Jr. I will also testify about several other topics that  
11 relate to the System, including environmental compliance, PAWC’s overall technical  
12 fitness to acquire and operate the System and certain commitments made by PAWC in the  
13 Asset Purchase Agreement between BNC and PAWC dated May 5, 2016 (“APA”).

14 **DESCRIPTION OF THE SYSTEM**

15 **Q. CAN YOU PLEASE DESCRIBE BNC’S SYSTEM?**

16 **A.** Based on information that PAWC received from BNC and evaluated, the System is a  
17 typical sanitary sewer system with a collection system consisting of approximately 27  
18 miles of pipe ranging from 6 to 21-inch diameter, three lift stations (or sewer pumping  
19 stations) and a wastewater treatment plant (“WWTP”). The majority of the collection  
20 system was constructed in the 1950’s with terra cotta (vitrified clay pipe) mains and brick

1 manholes. The lift stations are all float controlled and are locally operated. The main lift  
2 station is the Southeast station (aka Walnut Alley Sewer Pumping Station) which pumps  
3 approximately 80% of the flows that enter the WWTP with a 2,400 gpm capacity. The  
4 Southeast lift station is provided with two sets of pumping trains, each pump train  
5 consists of two pumps located in series. The Cedar Cliff lift station (aka Carlisle Road  
6 Pumping Station) has a 260 gpm capacity and the Drexel Hills lift station has a 100 gpm  
7 capacity. The Southeast station and Cedar Cliff station have emergency generators. All  
8 three lift stations have connections for portable pumps.

9 The WWTP was a contact stabilization process originally constructed in the  
10 1950's and upgraded to 1.25 mgd hydraulic design capacity in the 1970's. On June 23,  
11 2010, BNC received a copy of the new draft NPDES permit. The new permit has the  
12 same limits as the previous permit, but also includes net total nitrogen and phosphorus  
13 load limits of 22,831 pounds and 3,044 pounds per year respectively. In order to meet  
14 the new load limits established by DEP to meet Chesapeake Bay nutrient limits, the  
15 Borough upgraded the WWTP. In general, the WWTP plant appears to be well- designed  
16 and maintained, and in good physical condition. The WWTP influent flows into the  
17 headworks building which is capable of handling 3.5MGD, through an automated  
18 screening unit equipped with a washer and compactor, and then a vortex grit chamber  
19 which deposits grit into a dumpster within the headworks building. Flow exiting the  
20 headworks structure travels through an influent lift station, equipped with four pumps  
21 each rated at 815 gallons per minute, to an anaerobic selector and oxidation ditch, which  
22 is a biological treatment process similar to the system at the Coatesville treatment plant.  
23 Final clarifiers are used for settling out solids. Effluent from these secondary clarifiers

1 passes through two banks of ultraviolet (UV) light for disinfection prior to being  
2 discharged. The WWTP discharges treated effluent to the Susquehanna River and its  
3 tributaries under National Pollutant Discharge Elimination System (“NPDES”) Permit  
4 No. PA0026654 (“NPDES Permit”). Treated solids are transferred from the secondary  
5 clarifiers to an aerated sludge digester. Solids are dewatered with an Andritz centrifuge  
6 and conveyed to a roll-off dumpster and the dewatered solids are transported to a  
7 municipal landfill.

8 Under the proposed Transaction, PAWC will acquire and operate the entire  
9 System (which includes the collection system, lift stations and WWTP) and assume  
10 responsibilities for operation and maintenance as the holder of the NPDES Permit.

11 **Q. CAN YOU PLEASE DESCRIBE ANY ENVIRONMENTAL COMPLIANCE**  
12 **ISSUES THAT YOU ARE AWARE OF RELATING TO THE SYSTEM?**

13 **A.** Based on information received and reviewed by PAWC, there have been no violations or  
14 compliance issues with the Pennsylvania Department of Environmental Protection  
15 (“DEP”) or the U.S. Environmental Protection Agency involving the System in the past  
16 five years.

17 **Q. DO YOU HAVE ANY CONCERNS REGARDING NON-DOMESTIC**  
18 **DISCHARGES INTO THE BNC SYSTEM?**

19 **A.** No. BNC has ordinances that regulate discharges into the System. Currently there are no  
20 industrial waste dischargers in the Borough nor is the WWTP experiencing any treatment  
21 difficulties commonly associated with industrial waste discharges in a primarily domestic

1 waste system. Furthermore, per the APA's Section 6.3, BNC has agreed to retain  
2 ordinances that prohibit storm water system facilities from being connected to or from  
3 causing storm water flows into the System.

4 **Q. IS THE COMPANY'S APPLICATION IN THIS PROCEEDING COMPLIANT**  
5 **WITH THE APPLICABLE ACT 537 PLANS?**

6 **A.** Yes. The Borough of New Cumberland has a DEP-approved Act 537 Plan, and PAWC's  
7 request in its Application to provide wastewater services to the public within the Borough  
8 of New Cumberland municipal limits complies with BNC's Act 537 Plan. In addition, it  
9 is my understanding that PAWC's request in its Application to provide wastewater  
10 services to the three residents in Lower Allen Township ("Township") complies with the  
11 Township's DEP-approved Act 537 Plan ("Plan") pursuant to the DEP's approval on  
12 May 1, 1995, of revision to the Township's Plan via a planning module for land  
13 development.

14 **TRANSACTION IS IN THE PUBLIC INTEREST**

15 **Q. IS THERE ANYTHING RELATING TO THE APA THAT YOU WISH TO**  
16 **DISCUSS?**

17 **A.** Yes. As described in the direct testimony of Bernard J. Grundusky, following the closing  
18 of the Transaction, PAWC has committed to invest \$2,000,000 in capital improvements  
19 in water and wastewater infrastructure located within the Borough of New Cumberland  
20 over the first five years of PAWC's ownership of the System (*see* Section 6.8 of the  
21 APA), inclusive of PAWC's costs to construct the Carlisle Road Project (as described in

1 Section 6.11 of the APA). I wish to discuss both PAWC's infrastructure investment  
2 commitments and some timing considerations relating to the Carlisle Road Project due to  
3 planned repaving work by the Pennsylvania Department of Transportation ("PennDot").

4 **Q. PLEASE EXPLAIN PAWC'S COMMITMENT TO SPEND \$2 MILLION IN**  
5 **CAPITAL IMPROVEMENTS FOLLOWING THE CLOSING OF THE**  
6 **TRANSACTION.**

7 **A.** In Section 6.8 of the APA, PAWC committed to spend two million dollars in capital  
8 improvements to the water and wastewater infrastructure located within the Borough  
9 municipal limits over the five-year period immediately following the closing of the  
10 Transaction. Except for the design and permitting for the Carlisle Road Project, PAWC  
11 will handle all necessary engineering, design and construction work for the capital  
12 improvements, and make application for all necessary permits. BNC has agreed to fully  
13 cooperate with PAWC in connection with PAWC's completing the capital improvements,  
14 including providing necessary information as may be requested by PAWC and  
15 identifying areas where the capital improvements can be made in conjunction with street  
16 and sidewalk improvements.

17 **Q. HOW DID PAWC DETERMINE IT WAS ABLE TO COMMIT TO SPEND \$2**  
18 **MILLION IN WATER AND WASTEWATER CAPITAL PROJECTS WITHIN**  
19 **THE BOROUGH LIMITS DURING THIS TIME PERIOD?**

20 **A.** PAWC was able to commit to spending \$2 million on water and wastewater  
21 infrastructure owned by PAWC and located within the boundaries of the BNC within the  
22 first five years of PAWC's ownership of the BNC System based on the wastewater

1 capital projects that PAWC identified for completion during its review and evaluation of  
 2 the System, inclusive of routine wastewater spending that would occur under PAWC  
 3 ownership, as well as historical routine water system spending that PAWC has incurred  
 4 within the Borough limits.

5 **Q. PLEASE DESCRIBE PAWC’S PLANS FOR COMPLYING WITH THIS**  
 6 **COMMITMENT?**

7 **A.** Although PAWC may meet its investment commitment by spending on either water or  
 8 wastewater infrastructure projects, PAWC has preliminarily identified the following  
 9 wastewater capital projects to satisfy its commitment to spend \$2 million within the first  
 10 5 years of PAWC’s ownership of the BNC System:

<b>Year</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
I&I study	\$79,200				
Routine WW		\$264,000	\$264,000	\$264,000	\$264,000
SCADA and Security at Plant	\$79,200				
SCADA and Security at lift stations	\$118,800				
Carlisle Road Project	\$860,000				
<b>Total</b>	<b>\$1,137,200</b>	<b>\$264,000</b>	<b>\$264,000</b>	<b>\$264,000</b>	<b>\$264,000</b>
<b>Grand Total</b>					<b>\$2,193,000</b>

11 PAWC reserves the right to amend or change these projections as PAWC continues to  
 12 review, assess and prioritize infrastructure improvement projects needed on an annual  
 13 basis as part of PAWC's overall capital program. PAWC will also examine past  
 14 performance and conduct a qualitative assessment of the value of the improvements in  
 15 terms of water and wastewater service quality and reliability with consideration given to  
 16 the potential for coordination with street paving work.

1 **Q. ARE THE CAPITAL IMPROVEMENTS TO WHICH PAWC HAS COMMITTED**  
2 **IN THE APA BEING PRIORITIZED OVER CAPITAL PROJECTS IN OTHER**  
3 **AREAS OF PAWC’S WASTEWATER SYSTEM THAT WERE PREVIOUSLY**  
4 **PLANNED FOR THE SAME TIME PERIOD?**

5 **A.** No. The capital projects identified above are not being prioritized over capital projects in  
6 other areas of PAWC’s water or wastewater systems that were previously planned for this  
7 time period. As explained above, PAWC was able to commit to spending \$2 million on  
8 water and wastewater infrastructure within the Borough of New Cumberland within the  
9 first five years of PAWC’s ownership of the BNC System based on the wastewater  
10 capital projects that PAWC identified for completion during its review and evaluation of  
11 the System, as well as historical routine water system spending that PAWC has incurred  
12 within the BNC limits.

13 **Q. CAN YOU EXPLAIN THE CARLISLE ROAD PROJECT IDENTIFIED ABOVE?**

14 **A.** Yes, the Carlisle Road Project (“Project”) consists of the installation of (i) two parallel 6-  
15 inch ductile iron force mains in State Route 2018 that will be installed approximately  
16 1,850 feet east from the Northwest Pump Station and connect to an existing manhole; and  
17 (ii) a pump discharge piping modifications at the Northwest Pump Station, including  
18 lining of the wet well and replacement of the 10-inch wet well influent slide gate. BNC  
19 received their highway occupancy permit on April 20, 2016 and the DEP Water Quality  
20 Management Permit on July 5, 2016 and, per Section 6.11 of the APA, BNC committed  
21 to completing the design and transferring any necessary permits to PAWC prior to the  
22 closing of the Transaction. Promptly after PAWC takes ownership of the System, PAWC

1 plans to bid the Project and complete the installation of the necessary facilities to meet  
2 PennDot's repaving schedule.

3 **Q. PLEASE EXPLAIN THE TIMING CONSIDERATIONS WITH REGARD TO**  
4 **THE COMPLETION OF THE CARLISLE ROAD PROJECT.**

5 **A.** PennDot has announced plans to repave Carlisle Road (State Route 2018) in the Spring of  
6 2017. If PAWC is not able to coordinate the completion of installation of facilities with  
7 PennDot's repaving, it will significantly increase the costs of completing this project. To  
8 maximize costs savings and efficiencies, it would ideal for PAWC to be able to complete  
9 the installation of the necessary facilities in coordination with PennDot's timeline for  
10 completing the Carlisle Road Project.

11 **PAWC'S TECHNICAL FITNESS**

12 **Q. PLEASE DESCRIBE PAWC'S TECHNICAL FITNESS TO ACQUIRE, OWN**  
13 **AND OPERATE THE BNC SYSTEM.**

14 **A.** PAWC is the Commonwealth's largest investor-owned provider of water and wastewater  
15 services. As a leading wastewater provider in Pennsylvania, PAWC brings industry  
16 leading expertise and has extensive technical experience in upgrading, operating and  
17 maintaining sewer facilities. PAWC is a recognized leader in providing communities in  
18 the Commonwealth with well-maintained and reliable water and wastewater service and  
19 has extensive local knowledge due to our decades of experience providing water service  
20 to the Central PA communities. For wastewater treatment and collection alone, PAWC  
21 currently operates 15 wastewater treatment plants that serve approximately 50,000

1 persons and 750 commercial and industrial customers in 27 Pennsylvania municipalities.  
2 Treatment processes include state-of-the-art biological nutrient removal systems,  
3 sequential batch reactors, and oxidation ditches.

4 PAWC currently employs approximately 1,000 professionals with expertise in all  
5 areas of water and wastewater utility operations, including engineering, regulatory  
6 compliance, water and wastewater treatment plant operation and maintenance,  
7 distribution and collection system operation and maintenance, material management, risk  
8 management, human resources, legal, accounting, and customer service.

9 As a subsidiary of American Water Works Company (“American Water”),  
10 PAWC has available to it additional resources of highly trained professionals who have  
11 expertise in various specialized areas. American Water currently owns or operates  
12 approximately 200 wastewater operations through its subsidiaries in a number of states.  
13 American Water’s experience includes the full breadth of treatment processes – from  
14 facultative ponds to membrane biological reactors – in every climate zone across the U.S.  
15 More advanced technologies allow a number of American Water’s plants to utilize  
16 effluent for reuse applications, eliminating discharge to receiving streams. These diverse  
17 facilities have provided American Water operators and process experts with deep  
18 experience in the operation and maintenance of every possible type of wastewater  
19 treatment technology, as well as the experience available to support PAWC’s operations  
20 staff and facilities.

21 A 50-person team of American Water corporate engineers has handled a wide  
22 variety of system evaluations, selecting treatment processes and establishing critical

1 design criteria for water and wastewater treatment systems in order to improve operations  
2 and prioritize capital improvements.

3 PAWC also has specific experience in treatment technologies involving biological  
4 nutrient removal (“BNR”). PAWC operates three BNC treatment facilities, including our  
5 Coatesville, Fairview Township South and Franklin Township wastewater treatment  
6 plants, which range in size from 10,000 to 24,000,000 gpd. American Water, including  
7 PAWC and American Water’s other utility entities, plus American Water’s non-utility  
8 subsidiary, American Water Enterprises (“AWE”), currently operate 54 wastewater  
9 treatment plants utilizing BNR technology and processes nationwide.

10 PAWC has an established track record of successfully managing large capital  
11 investment projects in order to provide safe, adequate, and reliable service to the  
12 communities it serves on a continuous basis. PAWC has an ongoing program of capital  
13 investment focused on systematically replacing and adding new pipes, treatment and  
14 pumping facilities, and other water and wastewater infrastructure, thereby minimizing  
15 customer disruption caused by infrastructure failure. PAWC has funded in excess of \$1  
16 billion in capital construction over the past five years with expenditures expected to total  
17 \$275 million to \$300 million per year for the next five years. Capital planning is  
18 performed by in-house engineering staff and operations to establish capacity needs,  
19 regulatory impacts, service adequacy and reliability for PAWC’s wastewater systems.  
20 Project costs, alternatives and risks are also determined. Comprehensive periodic  
21 oversight of water and wastewater assets gives PAWC a clear and objective view of  
22 needs and potential capital project solutions.

1 **Q. PLEASE DESCRIBE PAWC'S TECHNICAL FITNESS TO PROVIDE**  
2 **WASTEWATER SERVICE TO BNC CUSTOMERS.**

3 **A.** PAWC currently serves more than 21,000 wastewater connections across the  
4 Commonwealth, with customers in Adams, Beaver, Chester, Clarion, Monroe,  
5 Northumberland, Pike, Washington and York counties. A map of PAWC's current  
6 service territories for wastewater service is attached to my direct testimony as **PAWC**  
7 **Exhibit MJG-1.** To provide wastewater service to those customers, PAWC currently  
8 operates 15 wastewater plants.

9 In operating those 15 wastewater plants, PAWC has had no material issues in  
10 complying with the Pennsylvania Public Utility Code, the Pennsylvania Clean Streams  
11 Law, or other regulatory requirements. Moreover, PAWC has the skill and expertise to  
12 respond to ever-increasing environmental standards for the treatment of wastewater and  
13 to manage the long term infrastructure issues inherent in wastewater systems.

14 **Q. IN YOUR OPINION IS PAWC EQUIPPED TO ADDRESS ENVIRONMENTAL**  
15 **COMPLIANCE ISSUES OF THE SYSTEM?**

16 **A.** Yes. As describe above, currently there are no known environmental compliance issues  
17 related to the System. With that said, PAWC's goal for the System, as well as the goal  
18 for the entire regulated water and wastewater operations of PAWC, is to be in 100%  
19 compliance with state and federal environmental laws and regulations. PAWC can draw  
20 upon a broad range of engineering and operational experience, as well as deep financial  
21 resources, to address any environmental compliance challenges of the System, and given

1 PAWC's existing platform in relation to operation of the water system in the region, we  
2 believe that PAWC is best positioned to provide those services on a cost-effective basis.

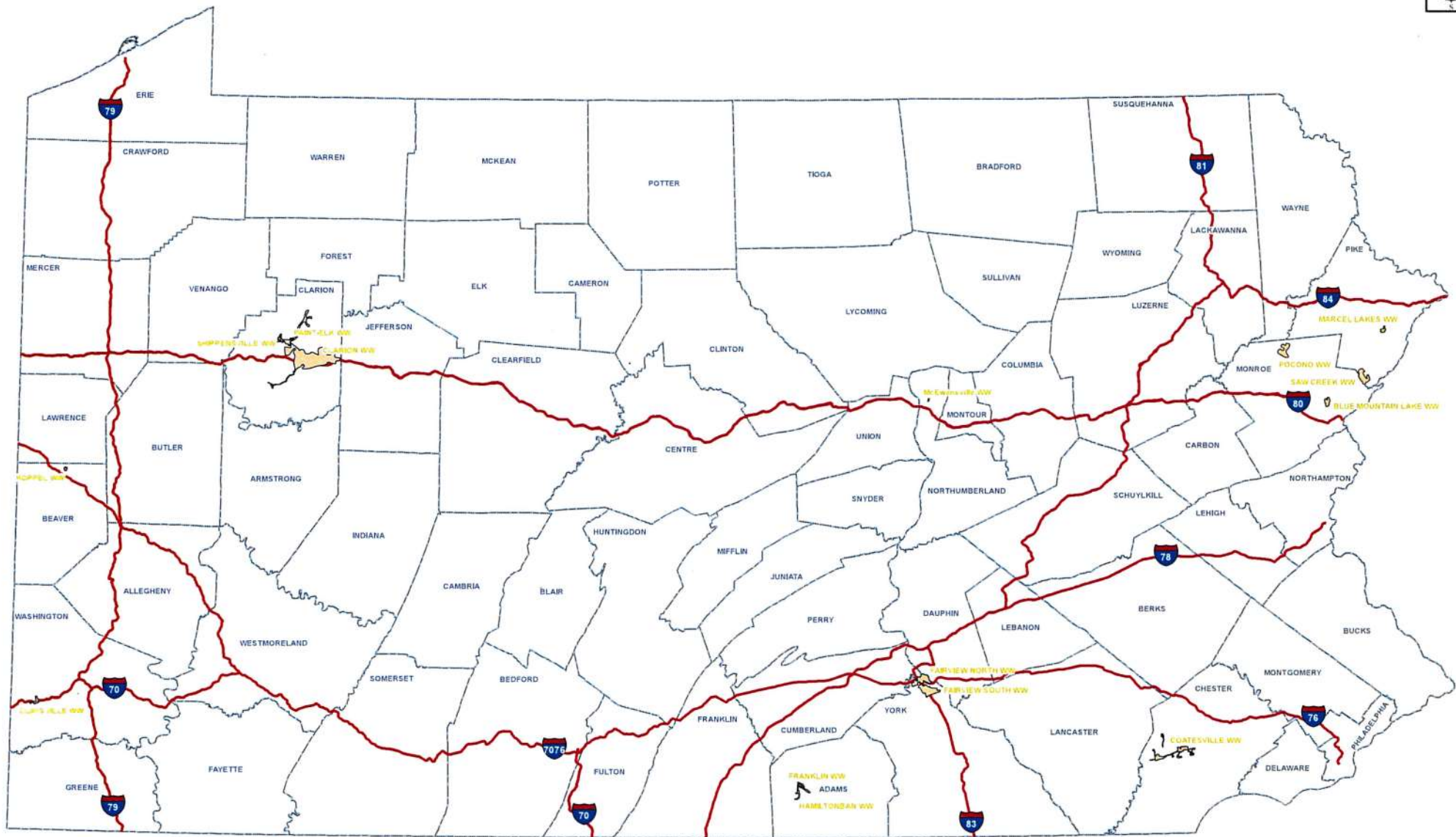
3 **CONCLUSION**

4 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

5 **A.** Yes. However, I reserve the right to supplement my testimony as additional issues and  
6 facts arise during the course of the proceeding. Thank you.

7

**PAWC Exhibit MJG-1**



### Pennsylvania American Water Company Wastewater Service Areas



- Legend
- PAWC Wastewater Service Areas
  - County Line
  - Interstates

TO BE USED FOR REFERENCE ONLY  
Although every effort has been made to ensure the accuracy of the information, errors and conditions originating from physical sources to develop the Certificated Service Territory may be reflected in the data supplied.

1 in = 30 miles

